

# Tehcast – investment casting and sand casting, flexibility and optimization

design • computer simulation •  
prototyping • casting • analysis •  
production

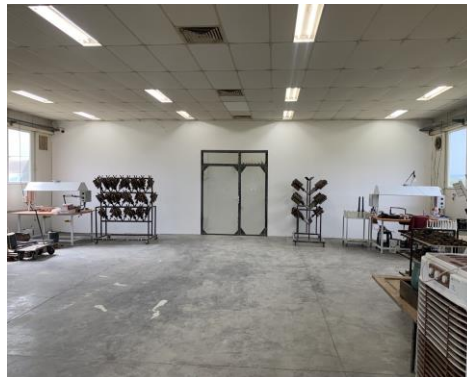
# Our advantages

- Computer simulation for detecting defects and optimization.  
Prototyping and comparison with real castings
- Access to the laboratory of Technical University – Gabrovo
- Metallographic analysis and mechanical testing
- Research and development activity for improvement of foundry technologies
- Best prices

# Investment casting and sand casting from Tehkast Ltd.

Four production sites for :

- One for making ceramic molds
- Two foundry workshops
- Workshop for cleaning castings and quality control



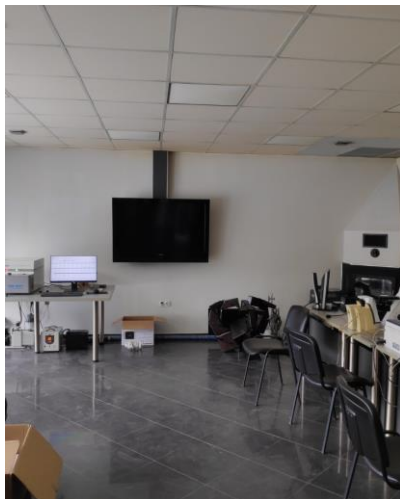
# Casting materials

We have experience in casting of:

- low-alloy steel
- manganese steel
- stainless steel
- grey iron
- ductile iron
- wear-resistant alloyed iron
- Ni-resist iron

# Quality control

Our main advantage is traceability and qualification of each batch from the respective furnace. Through thermal analysis of iron in the furnace, metallographic analysis and spectral analysis of steels. In this way you can be confident in the quality and the chemical composition. A certificate is issued for each batch of castings corresponding to the content of the metal in the respective furnace.



Wuxi Jiabo Instrument Technology Co., Ltd.  
2018-4-24 PM 01:23:28 TUE

TEN (°C)	1143.0
TEU (°C)	1133.0
TER (°C)	1136.0
NODULARITY	87%
NODULIZING GRADE	2
UNDERCOOLING $\Delta t_1$	10.0
UNDERCOOLING $\Delta t_2$	3.0

4 min

1000 °C

TEMP (°C)

1268

Tips

1. Spherulization is good
2. Inoculation moderate fading

START PAUSE/STOP SOFTWARE KEYBOARD EXIT DSC OFF



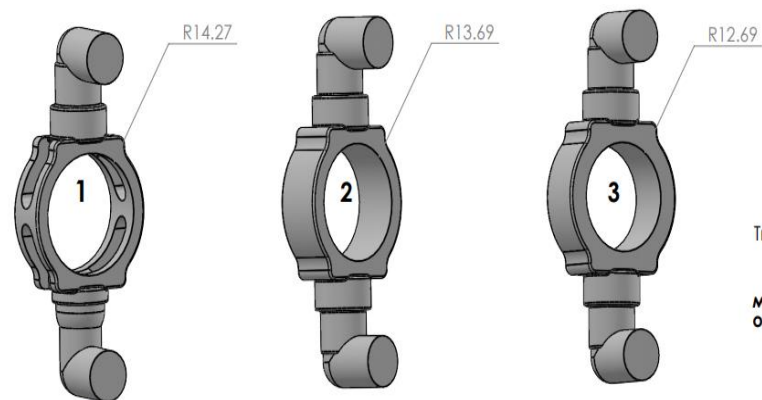
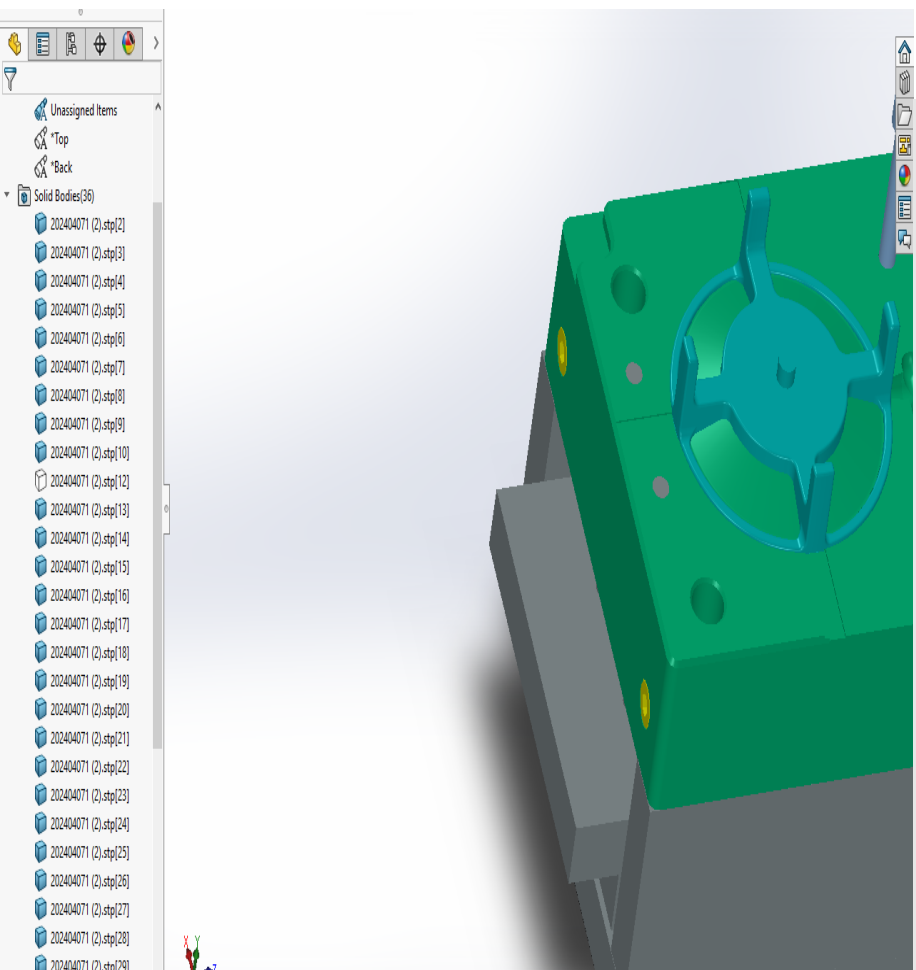
# Equipment

- Induction furnaces of 250 kg, 630 kg and laboratory 30 kg furnace
- Two wax injection machines for wax models
- Two molding machines for sand molds
- Three Shot blasting machines

## Laboratory equipment:

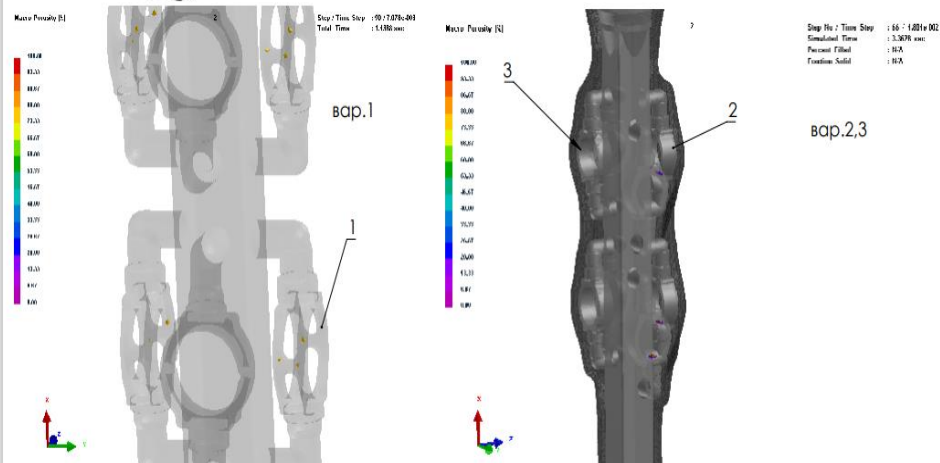
- Optical emission spectrometer
- Thermal analysis for iron
- Pyrometer for each furnace and calibration checker
- Metallographic microscope
- Brinell hardness tester

# Designing

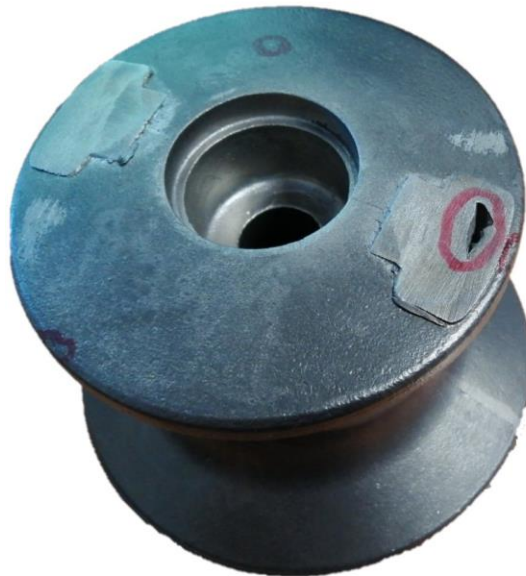
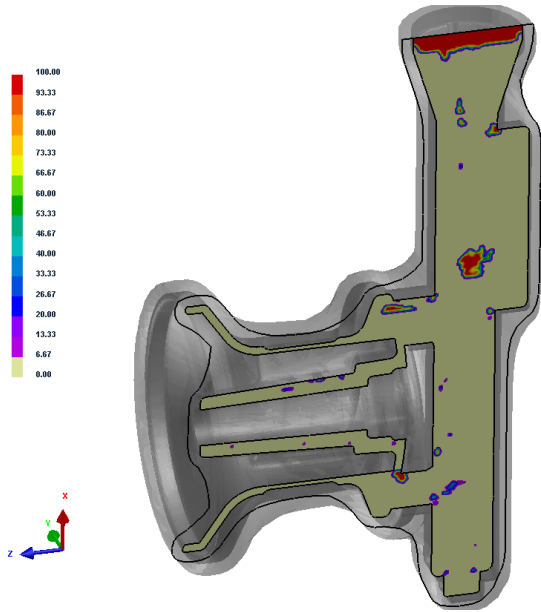


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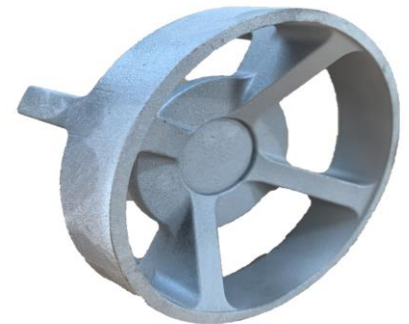


# Prototyping and defect analysis



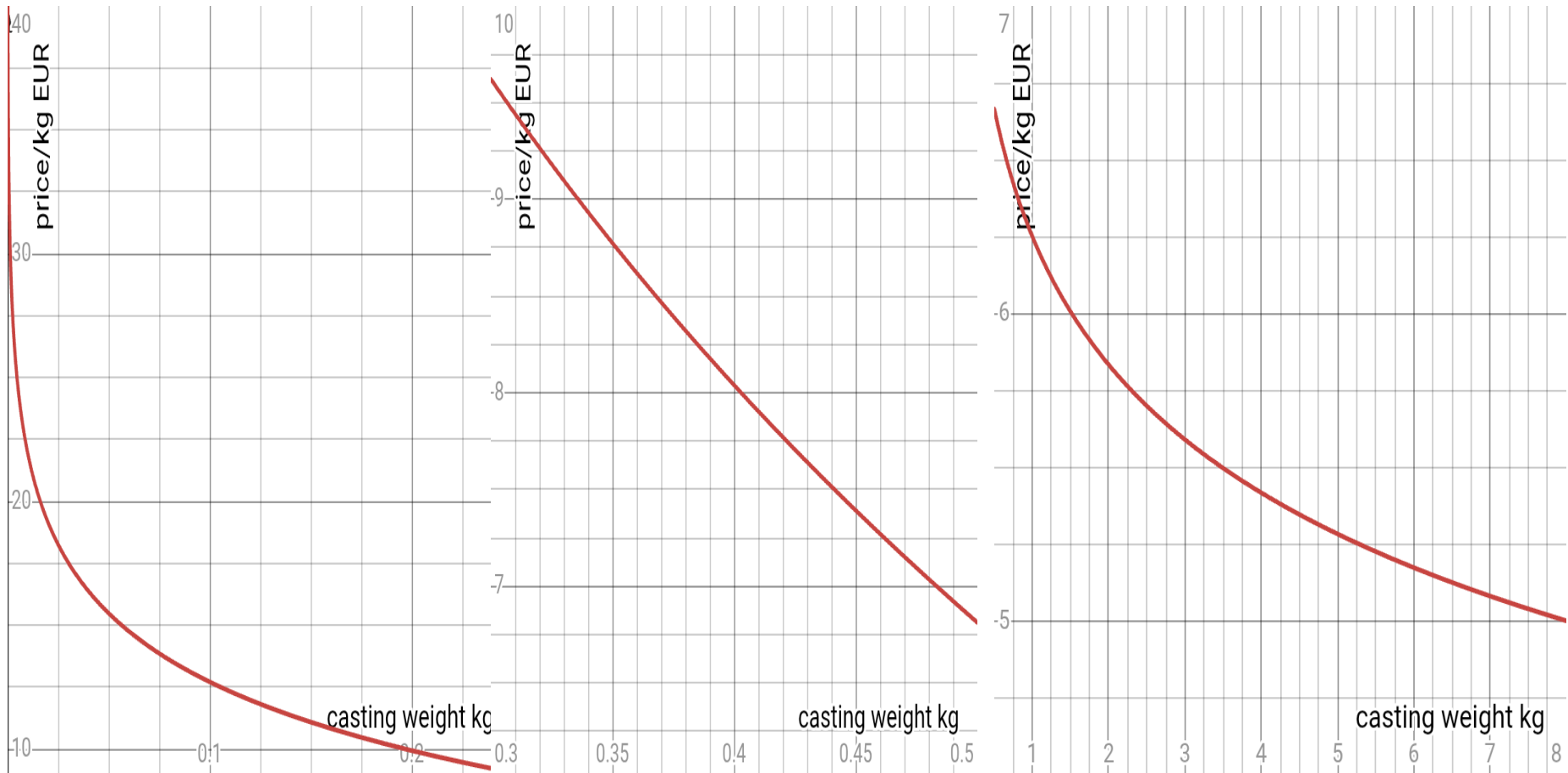


# Visual inspection of each wax model and casting



# Investment casting prices

## Low alloy steel



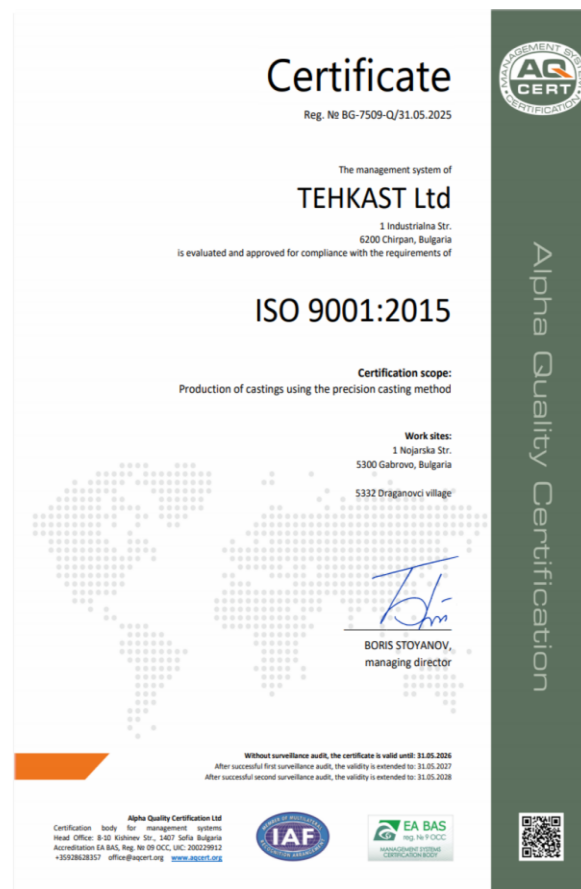
# Management system of Tehkast Ltd

The quality management system of Tehkast Ltd is certified according to ISO 9001:2015.

Scope of application: Production of castings by the method of precision casting.

Work sites:

- Nozharska Str. 1, 5300 Gabrovo
- Draganovtsi village, 5332 Bulgaria
- Popovtsi village, 5345 Bulgaria



## Contacts

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